

P-BOX II mobile power station user manual

(V1.2)

Note:

Please read the user manual before using. **BOLD** text relates to the safe use of the product.

Thank you for purchasing the WINDCAMP P-BOX mobile power station!

[Introduction]

P-BOX mobile power station uses a lithium polymer (LiPo) battery as the core of a large-capacity portable mobile power. The cells are arranged in a Series/Parallel configuration with the the main output voltage 9-12.6V. The maximum output current of 25Amps with a rated capacity of 21Ah (ie 21000mAh). There is an LCD real-time display of voltage and current that indicates for discharge and charge. There are outputs using Anderson PowerPoles in a standard configuration and banana plugs. In addition there is one USB charging output and one laptop charging output (voltage adjustable).

[Front panel]

- Four control switch right of the front panel, are pushed open (ON), pushdown closed (OFF).
- internal battery voltage display current total voltage.
- Current display as the current total current internal battery pack, the product of the Hall current sensing element, should stay away from the magnetic field so as not to affect accuracy. A steady current display when the external power supply unit, then A continues to flash while charging, and displays the current charge current.
- The laptop charging port (NB CHARGE OUT) is set at the factory to 20V. You may need to change the output voltage to match your laptop. Use the included screwdriver laptop charging voltage. The voltage can be adjusting the potentiometer (marked ADJ). Turn the small screw of the potentionmeter clockwise to increase voltage, counterclockwise to decrease. This operation requires the charging adapter cable (included in the accessory bag) into the notebook and use of an external multimeter. **Please exercise caution, beware of short circuit.** The port output voltage range is 16.5V to 25V. Laptop charging port maximum output current 1A. Note: The laptop charger output is only compatible with laptops that use a 2 wire connector. There is no provision for laptops that use a 3 wire connection with power detection.

[Main Outputs]

The rear panel of the DC OUT has three outputs: 4mm Banana Jacks and 2 Anderson PowerPoles. The three outputs are all in parallel. Anderson PowerPole outputs can be used for outputs of any current, the 4mm Banana Jacks should be limited to no more than 10amps.

Note: DC OUT voltage output will vary from a maximum of 12.6V (fully charged) to 9V (fully discharged). As with any battery as the P-Box II is discharged the voltage will drop until the low voltage protection is activated. Lithium polymer batteries have a fairly shallow discharge curve and will have voltages of 12.0V-11.0V or more for most of the discharge cycle. The discharge curve is fairly steep from 10.9V to 9.0V. Operating voltages of different brands of radios vary. Make sure you know what the operating parameters of your radios are and that they are compatible with the P-Box II's output range.

[For mobile phones, tablet PCs and other charge]

USB port is designed for mobile phones, tablet computers and other electrical equipment that supports USB charging. Turn the feature on by placing the USB toggle switch in the ON position, the LED indicator will turn on. You can now plug in your USB charge cable. USB port maximum output current is 3A.

[Use matching charger for the P-BOX II charge]

A dedicated charger 12.6V/2A is used to charge the P-Box II. In order to charge the PWR switch needs to be in the ON position. The charger has an indicator light: GREEN indicates either no load or a full charge. RED is displayed during the charge. During the charge cycle the LCD display will indicate the battery voltage and the charge current. The "A" in the AMPS display will blink on and off during the charge cycle. A complete charging cycle (from 9.0V) takes approximately 12-15 hours.

[Using an aftermarket balance charger to charge the P-BOX]

Windcamp recommends that you select a balance charger carefully. There are many inexpensive so-called "simple balancing charge" that actually are not. Windcamp has no specific recommendation at this time. When using the a balanced charger not only does the balanced distribution cable need to be connected, the charge line from the charger needs to be connected to the DC OUT. Balanced charge current must not exceed 5A. Contact windcamp273@gmail.com with questions.

[Safety Precautions]

- 1 Only use the included charger. Other chargers may damage or destroy the battery and circuitry.**
- 2 When using an aftermarket balanced charger, the charging current MUST BE less than 5A. Be sure all wiring and settings are correct before recharging.**
- 3 Never use a commercially available cheap "simple balancing charge" for the mobile power station charge, most likely damaged batteries!**
- 4 Recharge it after use. Do not use once the low voltage protection is tripped until completely recharged.**
- 5. Do not charge at temperatures below 0 °C/32F. It will affect the life of the batteries.**
- 6 This product is designed for maximum discharge current 25A. In practice, lower current discharge will extend the life of battery and its service life.**

[Carry and storage Precautions]

- 1 This product is rated capacity exceeds the limit specified in civil aviation. You cannot transport in checked or carry on bags.
- 2 Avoid long-term storage when fully charged. Fully charge just prior to use. A charge voltage of 10.5-11.5V is better for long-term storage.
- 3 In storage the P-Box II will micro discharge at about 70uA. A charge/discharge cycle is recommended every 3-4 months of storage.
- 4 Do not use this product in storage in a high-temperature environments, such as placing it in a car parked outdoors in summer.

[Technical parameters]

Product Name: P-BOX II mobile power station

Rated capacity: 21Ah (ie 21000mAh)

Main channel rated output voltage: 11.1V

Main channel output voltage range :9-12 .6 V

Maximum output current main channel: 25A

USB channel output voltage: 5V (3A Max)

Laptop charging channel output voltage: 16.5V-25V continuously adjustable (1A Max), the default 20V

Types of batteries: Lithium Polymer battery

Protection: short circuit protection, overcurrent protection, high temperature protection, over-discharge protection, overcharge protection

Overcharge protection threshold: 12.6V ($\pm 0.15V$)

Over-discharge protection threshold: 8.7V ($\pm 0.15V$)

High temperature protection from the control point: 55 °C (± 5 °C)

Weight: 1.95Kg

Dimensions: 138 × 268 × 48 (WDH, mm)

[Packing List]

P-BOX II × 1 mobile power station units

Charger × 1 只

45A Anderson plug × 2 对

Protection banana plug × 1 对

Balance charging cable × 1 条

Laptop charging cord × 1 条

Laptop charging adapter × 1 group

Laptop charging channel output voltage adjustment screwdriver × 1 把

[Warranty]

From the date of the sale of the P-BOX mobile power station and enjoy 1 year warranty against defects in materials and workmanship.

<http://www.windcamp-gear.com>

E-mail: windcamp273@gmail.com